

Application No. 10/645,160

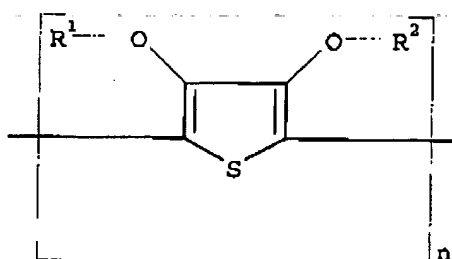
Reply to Office Action

*AMENDMENTS TO THE CLAIMS*

1. (Canceled).
2. (Currently Amended) A process for preparing a substantially transparent conductive layer configuration on a support, said layer configuration comprising in any order at least a first layer containing an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive silver. ~~Process according to claim 1,~~ wherein said photographic process comprises the steps of: coating a layer containing silver halide and gelatin with a weight ratio of gelatin to silver halide in the range of 0.05 to 0.3, image-wise exposing said silver halide-containing layer, and developing said exposed silver halide-containing layer to produce said second layer.
3. (Currently Amended) A process for preparing a substantially transparent conductive layer configuration on a support, said layer configuration comprising in any order at least a first layer containing an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive silver. ~~Process according to claim 1,~~ wherein said photographic process comprises the steps of: coating the support with a layer of a nucleation agent~~[[;]]~~ and producing a non-continuous silver layer on said nucleation layer using silver salt diffusion transfer.
4. (Currently Amended) The process ~~Process~~ according to claim 3, wherein said nucleation agent is palladium sulphide.
5. (Currently Amended) The process ~~Process~~ according to claim ~~[[1]]~~ 2, wherein said intrinsically conductive polymer contains structural units represented by formula (I):

Application No. 10/645,160

Reply to Office Action



(I)

wherein  $n$  is larger than 1 and each of  $R^1$  and  $R^2$  independently represents hydrogen or an optionally substituted  $C_{1-4}$  alkyl group or together represent an optionally substituted  $C_{1-4}$  alkylene group or an optionally substituted cycloalkylene group, preferably an ethylene group, an optionally alkyl-substituted methylene group, an optionally  $C_{1-12}$  alkyl- or phenyl-substituted ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group.

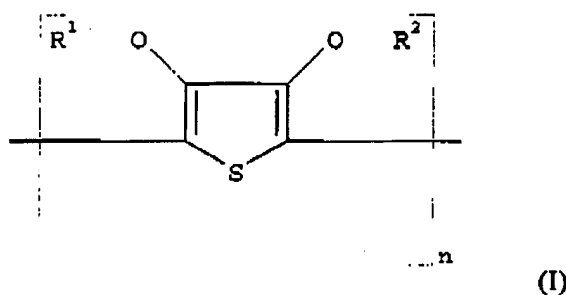
6. (Currently Amended) The process ~~Process~~ according to claim ~~[[1]]~~ 2, wherein said process further comprises coating said first layer prior to preparing said second layer by a photographic process.
7. (Currently Amended) A process for preparing a substantially transparent conductive layer configuration on a support, said layer configuration comprising in any order at least a first layer containing an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive silver. ~~Process according to claim 1,~~ wherein said process further comprises coating said first layer upon said second layer comprising a silver pattern.
8. (Original) A layer configuration obtained by a process for preparing a substantially transparent conductive layer configuration on a support, said layer configuration comprising in any order at least a first layer containing an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive

Application No. 10/645,160

Reply to Office Action

silver, said process comprising the step of: preparing said second layer by a photographic process, wherein said layer configuration further contains a 1-phenyl-5-mercapto-tetrazole compound in which the phenyl group is substituted with at least one electron accepting group.

9. (Currently Amended) The layer Layer configuration according to claim 8, wherein said photographic process comprises the steps of: coating a layer containing silver halide and gelatin with a weight ratio of gelatin to silver halide in the range of 0.05 to 0.3, image-wise exposing said silver halide-containing layer, and developing said exposed silver halide-containing layer to produce said second layer.
10. (Currently Amended) The layer Layer configuration according to claim 8, wherein said photographic process comprises the steps of: coating the support with a layer of a nucleation agent; producing a non-continuous silver layer on said nucleation layer using silver salt diffusion transfer.
11. (Currently Amended) The layer Layer configuration according to claim 10, wherein said nucleation agent is palladium sulphide.
12. (Currently Amended) The layer Layer configuration according to claim 8, wherein said intrinsically conductive polymer contains structural units represented by formula (I):



Application No. 10/645,160

Reply to Office Action

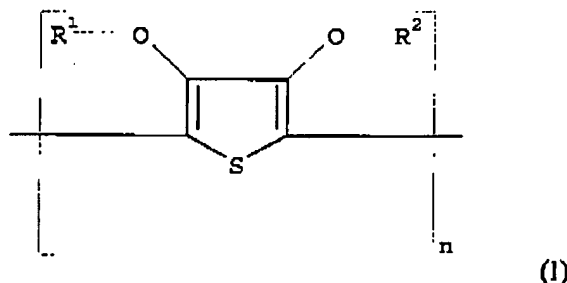
wherein  $n$  is larger than 1 and each of  $R^1$  and  $R^2$  independently represents hydrogen or an optionally substituted  $C_{1-4}$  alkyl group or together represent an optionally substituted  $C_{1-4}$  alkylene group or an optionally substituted cycloalkylene group, preferably an ethylene group, an optionally alkyl-substituted methylene group, an optionally  $C_{1-12}$  alkyl- or phenyl-substituted ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group.

13. (Currently Amended) The layer ~~Layer~~ configuration according to claim 8, wherein said process further comprises coating said first layer prior to preparing said second layer by a photographic process.
14. (Currently Amended) The layer ~~Layer~~ configuration according to claim 8, wherein said process further comprises coating said first layer upon said second layer comprising a silver pattern.
15. (Previously Presented) A light emitting diode comprising a layer configuration prepared by a process for preparing a substantially transparent conductive layer configuration on a support, said layer configuration comprising in any order at least a first layer containing an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive silver, said process comprising the step of preparing said second layer by a photographic process, wherein said process further comprises coating said first layer upon said second layer comprising a silver pattern.
16. (Currently Amended) The light ~~Light~~ emitting diode according to claim 15, wherein said photographic process comprises the steps of: coating a layer containing silver halide and gelatin with a weight ratio of gelatin to silver halide in the range of 0.05 to 0.3, image-wise exposing said silver halide-containing layer, and developing said exposed silver halide-containing layer to produce said second layer.

Application No. 10/645,160

Reply to Office Action

17. (Currently Amended) The light ~~Light~~ emitting diode according to claim 15, wherein said photographic process comprises the steps of: coating the support with a layer of a nucleation agent[[:]] and producing a non-continuous silver layer on said nucleation layer using silver salt diffusion transfer.
18. (Currently Amended) The light ~~Light~~ emitting diode according to claim 17, wherein said nucleation agent is palladium sulphide.
19. (Currently Amended) The light ~~Light~~ emitting diode according to claim 15, wherein said intrinsically conductive polymer contains structural units represented by formula (I):



- wherein n is larger than 1 and each of R<sup>1</sup> and R<sup>2</sup> independently represents hydrogen or an optionally substituted C<sub>1-4</sub> alkyl group or together represent an optionally substituted C<sub>1-4</sub> alkylene group or an optionally substituted cycloalkylene group, preferably an ethylene group, an optionally alkyl-substituted methylene group, an optionally C<sub>1-12</sub> alkyl- or phenyl-substituted ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group.
20. (Currently Amended) The light ~~Light~~ emitting diode according to claim ~~[[15]]~~ 43, wherein said process further comprises coating said first layer prior to preparing said second layer by ~~[[a]]~~ said photographic process.

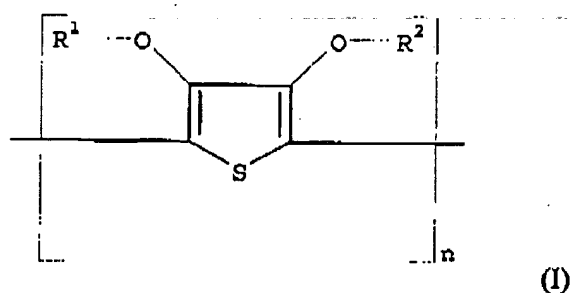
Application No. 10/645,160

Reply to Office Action

21. (Canceled)
22. (Original) A photovoltaic device comprising a layer configuration prepared by a process for preparing a substantially transparent conductive layer configuration on a support, said layer configuration comprising in any order at least a first layer containing an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive silver, said process comprising the step of: preparing said second layer by a photographic process.
23. (Currently Amended) The photovoltaic ~~Photovoltaic~~ device according to claim 22, wherein said photographic process comprises the steps of: coating a layer containing silver halide and gelatin with a weight ratio of gelatin to silver halide in the range of 0.05 to 0.3, image-wise exposing said silver halide-containing layer, and developing said exposed silver halide-containing layer to produce said second layer.
24. (Currently Amended) The photovoltaic ~~Photovoltaic~~ device according to claim 22, wherein said photographic process comprises the steps of: coating the support with a layer of a nucleation agent; producing a non-continuous silver layer on said nucleation layer using silver salt diffusion transfer.
25. (Currently Amended) The photovoltaic ~~Photovoltaic~~ device according to claim 24, wherein said nucleation agent is palladium sulphide.
26. (Currently Amended) The photovoltaic ~~Photovoltaic~~ device according to claim 22, wherein said intrinsically conductive polymer contains structural units represented by formula (I):

Application No. 10/645,160

Reply to Office Action



wherein  $n$  is larger than 1 and each of  $R^1$  and  $R^2$  independently represents hydrogen or an optionally substituted  $C_{1-4}$  alkyl group or together represent an optionally substituted  $C_{1-4}$  alkylene group or an optionally substituted cycloalkylene group, preferably an ethylene group, an optionally alkyl-substituted methylene group, an optionally  $C_{1-12}$  alkyl- or phenyl-substituted ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group.

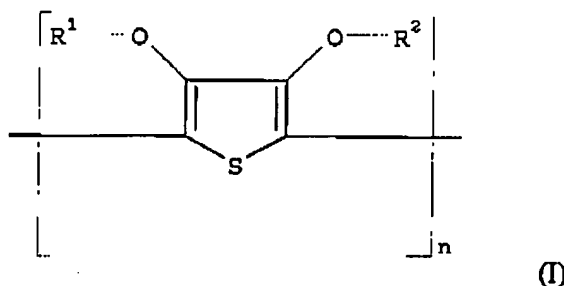
27. (Currently Amended) The photovoltaic Photovoltaic device according to claim 22, wherein said process further comprises coating said first layer prior to preparing said second layer by a photographic process.
28. (Currently Amended) The photovoltaic Photovoltaic device according to claim 22, wherein said process further comprises coating said first layer upon said second layer comprising a silver pattern.
29. (Original) A transistor comprising a layer configuration prepared by a process for preparing a substantially transparent conductive layer configuration on a support, said layer configuration comprising in any order at least a first layer containing an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive silver, said process comprising the step of: preparing said second layer by a photographic process.
30. (Currently Amended) The transistor Transistor according to claim 29, wherein said photographic process comprises the steps of: coating a layer containing silver halide

Application No. 10/645,160

Reply to Office Action

and gelatin with a weight ratio of gelatin to silver halide in the range of 0.05 to 0.3, image-wise exposing said silver halide-containing layer, and developing said exposed silver halide-containing layer to produce said second layer.

31. (Currently Amended) The transistor ~~Transistor~~ according to claim 29, wherein said photographic process comprises the steps of: coating the support with a layer of a nucleation agent; producing a non-continuous silver layer on said nucleation layer using silver salt diffusion transfer.
32. (Currently Amended) The transistor ~~Transistor~~ according to claim 31, wherein said nucleation agent is palladium sulphide.
33. (Currently Amended) The transistor ~~Transistor~~ according to claim 29, wherein said intrinsically conductive polymer contains structural units represented by formula (I):



wherein  $n$  is larger than 1 and each of  $R^1$  and  $R^2$  independently represents hydrogen or an optionally substituted  $C_{1-4}$  alkyl group or together represent an optionally substituted  $C_{1-4}$  alkylene group or an optionally substituted cycloalkylene group, preferably an ethylene group, an optionally alkyl-substituted methylene group, an optionally  $C_{1-12}$  alkyl- or phenyl-substituted ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group.



Application No. 10/645,160

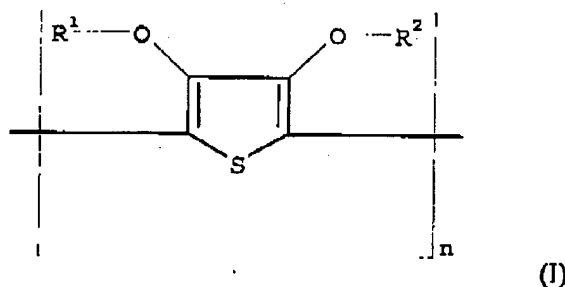
Reply to Office Action

34. (Currently Amended) The transistor ~~Transistor~~ according to claim 29, wherein said process further comprises coating said first layer prior to preparing said second layer by a photographic process.
35. (Currently Amended) The transistor ~~Transistor~~ according to claim 29, wherein said process further comprises coating said first layer upon said second layer comprising a silver pattern.
36. (Previously Presented) An electroluminescent device comprising a layer configuration prepared by a process for preparing a substantially transparent conductive layer configuration on a support, said layer configuration comprising in any order at least a first layer comprising an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive silver, said process comprising the step of preparing said second layer by a photographic process, wherein said process further comprises coating said first layer upon said second layer comprising a silver pattern.
37. (Currently Amended) The electroluminescent ~~Electroluminescent~~ device according to claim 36, wherein said photographic process comprises the steps of: coating a layer containing silver halide and gelatin with a weight ratio of gelatin to silver halide in the range of 0.05 to 0.3, image-wise exposing said silver halide-containing layer, and developing said exposed silver halide-containing layer to produce said second layer.
38. (Currently Amended) The electroluminescent ~~Electroluminescent~~ device according to claim 36, wherein said photographic process comprises the steps of: coating the support with a layer of a nucleation agent; producing a non-continuous silver layer on said nucleation layer using silver salt diffusion transfer.

Application No. 10/645,160

Reply to Office Action

39. (Currently Amended) The electroluminescent ~~Electroluminescent~~ device according to claim 38, wherein said nucleation agent is palladium sulphide.
40. (Currently Amended) The electroluminescent ~~Electroluminescent~~ device according to claim 36, wherein said intrinsically conductive polymer contains structural units represented by formula (I):



- wherein n is larger than 1 and each of R<sup>1</sup> and R<sup>2</sup> independently represents hydrogen or an optionally substituted C<sub>1-4</sub> alkyl group or together represent an optionally substituted C<sub>1-4</sub> alkylene group or an optionally substituted cycloalkylene group, preferably an ethylene group, an optionally alkyl-substituted methylene group, an optionally C<sub>1-12</sub> alkyl- or phenyl-substituted ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group.
41. (Currently Amended) The electroluminescent ~~Electroluminescent~~ device according to claim [[36]] 48, wherein said process further comprises coating said first layer prior to preparing said second layer by a photographic process.
42. (Canceled)
43. (Currently Amended) A light emitting diode comprising a layer configuration prepared by a process for preparing a substantially transparent conductive layer configuration on a support, said layer configuration comprising in any order at least

Application No. 10/645,160

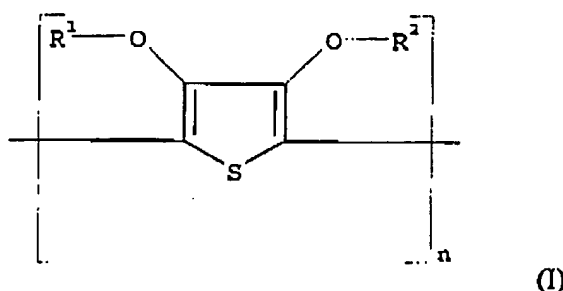
Reply to Office Action

a first layer containing an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive silver, said process comprising the step of: preparing said second layer by a photographic process, wherein said photographic process comprises the steps of: coating the support with a layer of a nucleation agent[[:]] and producing a non-continuous silver layer on said nucleation layer using silver salt diffusion transfer.

44. (Currently Amended) A light emitting diode comprising a layer configuration prepared by a process for preparing a substantially transparent conductive layer configuration on a support, said layer configuration comprising in any order at least a first layer containing an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive silver prepared by a process comprising a photographic process. ~~Light emitting diode according to claim 43,~~ wherein said photographic process comprises the steps of: coating a layer containing silver halide and gelatin with a weight ratio of gelatin to silver halide in the range of 0.05 to 0.3, image-wise exposing said silver halide-containing layer, and developing said exposed silver halide-containing layer to produce said second layer.
45. (Currently Amended) The light ~~Light~~ emitting diode according to claim 43, wherein said nucleation agent is palladium sulphide.
46. (Currently Amended) The light ~~Light~~ emitting diode according to claim 43, wherein said intrinsically conductive polymer contains structural units represented by formula (I):

Application No. 10/645,160

Reply to Office Action



wherein  $n$  is larger than 1 and each of  $R^1$  and  $R^2$  independently represents hydrogen or an optionally substituted  $C_{1-4}$  alkyl group or together represent an optionally substituted  $C_{1-4}$  alkylene group or an optionally substituted cycloalkylene group, preferably an ethylene group, an optionally alkyl-substituted methylene group, an optionally  $C_{1-12}$  alkyl- or phenyl-substituted ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group.

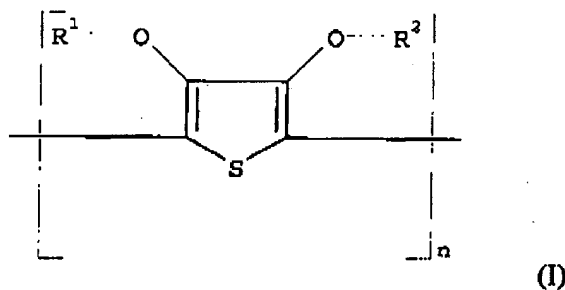
47. (Currently Amended) The light ~~Light~~ emitting diode according to claim 43, wherein said process further comprises coating said first layer prior to preparing said second layer by a photographic process.
48. (Currently Amended) An electroluminescent device comprising a layer configuration prepared by a process for preparing a substantially transparent conductive layer configuration on a support, said layer configuration comprising in any order at least a first layer containing an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive silver, said process comprising the step of: preparing said second layer by a photographic process, wherein said photographic process comprises the steps of: coating the support with a layer of a nucleation agent[[:]] and producing a non-continuous silver layer on said nucleation layer using silver salt diffusion transfer.
49. (Currently Amended) An electroluminescent device comprising a layer configuration prepared by a process for preparing a substantially transparent

Application No. 10/645,160

Reply to Office Action

conductive layer configuration on a support, said layer configuration comprising in any order at least a first layer comprising an intrinsically conductive polymer and a second layer consisting of a non-continuous layer of conductive silver, said process comprising the step of preparing said second layer by a photographic process.  
~~Electroluminescent device according to claim 48,~~ wherein said photographic process comprises the steps of: coating a layer containing silver halide and gelatin with a weight ratio of gelatin to silver halide in the range of 0.05 to 0.3, image-wise exposing said silver halide-containing layer, and developing said exposed silver halide-containing layer to produce said second layer.

50. (Currently Amended) The electroluminescent ~~Electroluminescent~~ device according to claim 48, wherein said nucleation agent is palladium sulphide.
51. (Currently Amended) The electroluminescent ~~Electroluminescent~~ device according to claim 48, wherein said intrinsically conductive polymer contains structural units represented by formula (I):



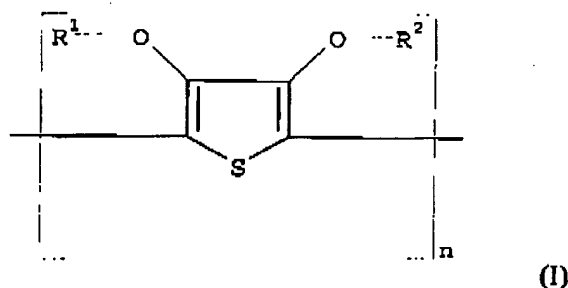
wherein  $n$  is larger than 1 and each of  $R^1$  and  $R^2$  independently represents hydrogen or an optionally substituted  $C_{1-4}$  alkyl group or together represent an optionally substituted  $C_{1-4}$  alkylene group or an optionally substituted cycloalkylene group, preferably an ethylene group, an optionally alkyl-substituted methylene group, an optionally  $C_{1-12}$  alkyl- or phenyl-substituted ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group.

Application No. 10/645,160

Reply to Office Action

52. (Currently Amended) ~~The electroluminescent~~ ~~Electroluminescent~~ device according to claim 48, wherein said process further comprises coating said first layer prior to preparing said second layer by a photographic process.

53. (New) The process according to claim 3, wherein said intrinsically conductive polymer contains structural units represented by formula (I):



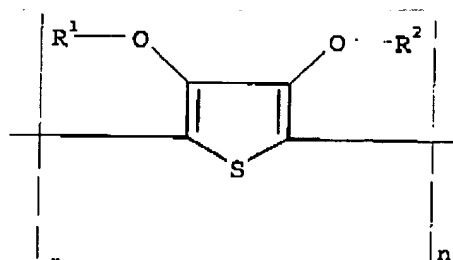
wherein n is larger than 1 and each of R<sup>1</sup> and R<sup>2</sup> independently represents hydrogen or an optionally substituted C<sub>1-4</sub> alkyl group or together represent an optionally substituted C<sub>1-4</sub> alkylene group or an optionally substituted cycloalkylene group, preferably an ethylene group, an optionally alkyl-substituted methylene group, an optionally C<sub>1-12</sub> alkyl- or phenyl-substituted ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group.

54. (New) The process according to claim 3, wherein said process further comprises coating said first layer prior to preparing said second layer by a photographic process.

55. (New) The process according to claim 7, wherein said intrinsically conductive polymer contains structural units represented by formula (I):

Application No. 10/645,160

Reply to Office Action



wherein  $n$  is larger than 1 and each of  $R^1$  and  $R^2$  independently represents hydrogen or an optionally substituted  $C_{1-4}$  alkyl group or together represent an optionally substituted  $C_{1-4}$  alkylene group or an optionally substituted cycloalkylene group, preferably an ethylene group, an optionally alkyl-substituted methylene group, an optionally  $C_{1-12}$  alkyl- or phenyl-substituted ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group.

56. (New) The process according to claim 7, wherein said process further comprises coating said first layer prior to preparing said second layer by a photographic process.

This listing of claims replaces all prior versions, and listings, of claims in the application.